Meeting Notes
NORTH DELTA IMPROVEMENTS GROUP MEETING
Wednesday, January 12, 2005
9:30-11:30 at Jones & Stokes (2600 V Street)

ATTENDANCE LIST:

Brown, David	Sacramento-Yolo Mosquito and Vector Control District (SYMVCD)
Burkholder, Brad	California Department of Fish and Game (DFG)
Crouch, Craig	Sacramento County Department of Water Resources
Elliott, Chirs	Jones & Stokes (J&S)
Fernandez, Patricia	California Bay-Delta Authority (CBDA)
Fleenor, Bill	University of California, Davis (UCD)
Hadl, Stefan	KCRA-TV
Hoppe, Walt	Point Pleasant
Kirkham, Bill	Franklin Pond
Knittweis, Gwen	California Department of Water Resources North Delta (DWR)
Kreinberg, Grant	Sacramento Area Flood Control Agency (SAFCA)
Kwan, Johnathan	Department of Health Services
Martin, Monica	DWR
Martin, Sara	J&S
Mello, Steve	Reclamation District 563
Moughamian, Raffi	UCD
Schmutte, Curt	DWR
Simons, Rachel	East Bay Municipal Utility District (EBMUD)
Szczepankowsia, Emilia	EBMUD
Trieu, Don	MBK Engineers
Van Loben Sels, Topper	DPC/North Delta Water Agency (NDWA)
Whitener, Keith	The Nature Conservancy (TNC)
Zemitis, Collette	DWR

HANDOUTS

- Meeting Agenda
- Meeting Notes from December 1, 2004 meeting
- North Delta Mike 11 modeling results handout packet

1. INTRODUCTIONS – Gwen Knittweis, DWR

Gwen Knittweis welcomed everyone to the meeting and wished all a happy new year. The meeting attendees introduced themselves, and Ms. Knittweis invited any comments on the notes from December's meeting. No comments were volunteered, and Ms. Knittweis said that comments could be sent to the North Delta reflector e-mail address, which is ndelta@dop.water.ca.gov.

2. SACRAMENTO COUNTY COORDINATION UPDATE – Curt Schmutte, DWR and Craig Crouch, Sacramento County

Curt Schmutte informed the group that since December's NDIG meeting, at which the County of Sacramento expressed discomfort with the selection of project alternatives, DWR met with the County, as well as with SAFCA, about how to proceed while incorporating the County's concerns. It was decided that the county would use their resources to analyze additional alternatives for inclusion in the project EIR. Keith DeVore, Director, County of Sacramento Department of Water Resources, and Lester Snow, Director of the California Department of Water Resources, will be

meeting within the next week to iron out logistical issues, such as lead agency assignment and how to coordinate outreach.

Craig Crouch explained to the group that at this time, the County would be expanding the array of evaluated alternatives to include three alternative separable elements focused on mitigating flood hazard in the I-5 and Point Pleasant area:

- Alternative 11F (with some adjustments to levee alignments in the Franklin Pond area) – This is the alternative for local flood relief preferred by the Board of Supervisors since 1997.

- A scaled-back structural alternative, including only Lambert Road improvements and remediation of defects in existing RD 1002 levees (including the UPRR embankment), which lowers 100-year flood stages west of I-5 to less than 13.5 feet (i.e. below the grade of the highway shoulder).

- A non-structural alternative which includes a combination of suppressed tailwater (provided by the existing downstream detention alternatives on Staten Island), structure-raising, flood insurance, and flood/conservation easement purchases.

The County will encourage the community to choose one of these three, or develop a fourth alternative for study.

Mr. Crouch clarified that the County's goal in analyzing additional alternatives is to ensure that there is no diminution in the flood control benefits that the stakeholders have already come to expect from the North Delta project. Mr. Crouch also pointed out that Sacramento County comes to the table with the ability to cost share, as they have $11 million in their budget for flood relief improvements for the Point Pleasant area.

Sacramento County expects this process to take about six to eight months, and hopes to cause the least amount of delay to the project as possible. Mr. Crouch assured the stakeholders that there would be plenty of opportunities for public input, and that stakeholders could expect a newsletter to be sent out in a couple of months scheduling a public meeting on the topic. Mr. Crouch then opened the floor for any questions.

Topper Van Loben Sels stated he remembered the original goal of the North Delta project as providing all the stakeholders in the North Delta (i.e. Don Nottoli's constituents) area with a one-foot reduction in flood stage. It appears as if the project focus has now narrowed in on Point Pleasant. Mr. Van Loben Sels feels that it is more important to reduce the flood risk to certain other areas, like the town of Locke, where sudden levee breaks threaten the lives of numerous residents. Point Pleasant residents do not usually have lives threatened because there is usually adequate warning. Mr. Van Loben Sels asked if the County could guarantee that all Don Nottoli's constituents would be safe.

Mr. Crouch answered that it is not strictly up to Sacramento County—the County in this case is just trying to ensure that its own concerns are addressed. He does not feel it would be difficult to get the County to consider improving flood control for Locke, but feels that it might have to happen on a longer timeline, as this is a "one-shot deal" for Point Pleasant.

Walt Hoppe asked if the Locke levees could be improved through the CALFED Levee Program. Mr. Schmutte responded that if the Corps receives the $90 million for levee improvements, DWR will certainly push them to consider the levees near Locke as a priority.

3. HYDRAULIC MODELING RESULTS PRESENTATION – Bill Fleenor, UC Davis

Mr. Fleenor quickly recapped his presentation to the NDIG in December, during which he presented the MIKE 11 modeling results for the ecological restoration options during low-flow storm events. The conclusion drawn from the modeling is that hydraulically, there is not a lot of difference between the various eco restoration options.

Mr. Fleenor reminded the group that the model has been calibrated to a number of storm events, including the 1986, 1997, 1998, and 2000 events. The North Delta area is a complex hydraulic system, receiving flows from numerous tributaries, so when referring to a "20-year event" or a "100-year event", Mr. Fleenor is referring to a 20-year event or a 100-year event at Michigan Bar.

Mr. Fleenor then showed the modeling results of high-flow storm events for the ecological restoration options, for which he used the hydrology from the 1997 flood. Again, the results for all options were very similar. Each option lowers upstream stages and slightly raises downstream stages. Since the stage differences between the restoration options showed to be insignificant, it was deemed appropriate to model flood control options coupled with a single restoration option. Ecosystem restoration option #2 was selected since it is likely that downstream stages would be elevated for a longer duration than ecosystem restoration option #1.

Mr. Fleenor moved on to showing the modeling results for the various flood control options, which were all modeled with eco restoration option #2. In general, all of the Staten Island detention options lower stages across the board, and dredging raises downstream stages. When all flood control options were modeled with a weir at 10 feet, flood control option #1 (detention at the north end of Staten Island) showed the greatest reduction in stage across the board, ranging from 0.7 to 0.1 foot stage reduction, with a 16,000 acre-foot volume in the detention basin. Due to the hydraulic gradient from the northern end to the southern end of Staten Island, the north Staten detention pulls off the greatest volume of flood flows, when compared with flood control options #2 and #3.

Mr. Crouch noticed that the weirs at the entry to the Staten Island detention basins are shown at 10 feet in height. He asked how that number was decided upon. Mr. Fleenor responded that the plan for Staten Island is to flood it no more frequently than the 1:10 statistical event, as determined by the 1992 USACE study that produced a stage frequency curve at New Hope Landing. This study depicts the 10-year flood return interval at the New Hope gage as 10 feet, so the weir height for all flood control options was set at 10 feet for the initial runs.

Subsequent to initial flood control option runs where all weir heights were set at 10', consideration was given to the hydraulic gradient from New Hope Landing to the weir location for the East and West Staten Detention options. Approximating a stage drop of 2' and 1.5' (using historic data) from New Hope Landing to the weir location for flood control option #2 and #3, respectively, additional model runs were performed to determine the peak stages and volume of water entering the detention basins as the height of the weir is adjusted. The was done to define the functionality of each detention basin option for the same criteria of not inundating any basin more frequently than the 1:10 year event, while achieving the greatest flood control benefit possible. With a weir height of 8' for flood control option #2, the detention basin volume is 20,000 acre-feet. Flood control option #3

detention captures a volume of 14,000 acre-feet with a weir height of 8.5'.

Mr. Fleenor pointed out that they also modeled degradation of levees on Dead Horse Island. Degraded levees on Dead Horse Island result in almost no stage reduction for the North Delta area. However, degrading the levees on Dead Horse allows twice as much water to enter the west side detention basin on Staten in flood control option #2 (it increases the volume from 1,700 acre-feet to 3,200 acre-feet).

Mr. Crouch asked if the footprints of the detention basins had been delineated yet. Mr. Fleenor answered that it was not necessary to delineate the footprints, as the model only requires the input of maximum retention volume. Monica Martin at DWR North Delta calculated the detention volumes for each flood control option based on the Lidar topographic data on Staten Island. Ms. Martin indicated that the footprints would be roughly sized at:

- 1,000 acres for flood control option #1,
- 1,100 acres for flood control option #2, and
- 890 acres for flood control option #3.

Mr. Crouch then inquired as to TNC's preferred alternative. Keith Whitener said that it is a delicate situation because of the various farmland and habitat values. Flood control option #3 would best preserve farming access, whereas flood control option #1 would preserve the most crane habitat. Mr. Crouch observed that flood control options #2 and #3 would require significantly more earthwork than option #1, and suggested considering implementation of flood control option #1 with additional earthwork to widen the levee road for farm access. Ms. Knittweis felt that might be a feasible idea, and further wondered if, since the project would be required to pump off a certain amount of water from the detention basins within seven days of inundation, an access road could be located at that specific height so farm access would be lost for no more than seven days. Mr. Whitener expressed some doubt, since access is critical, particularly during a floodfight. Mr. Hoppe suggested locating the access road on top of the internal levee, since the internal levees will need to be designed to dam standards to comply with DWR Division of Safety of Dams requirements.

Mr. Fleenor pointed out that flood control option #1 is very sensitive to weir height, whereas options #2 and #3 are more sensitive to conveyance capacity through the setback levees leading to the weirs. He then showed the results of lowering the weir height in flood control option #1. Lowering the weir height does allow for more volume to be taken off the peak flow, but ends up having an adverse effect downstream, because it encourages the water to flow faster downstream.

A meeting participant asked if modeling a different event, like the 1986 flood, which had a much flatter hydrograph, would have different results. Mr. Fleenor responded that it would not make a difference in this case, because the lowering of McCormack-Williamson levees spreads out the peak of the 1997 hydrograph.

Steve Mello recommended that project staff look at Steve Sinnock's study on sediment accumulation on the North Fork Mokelumne River.

Mr. Crouch indicated that Sacramento County will be developing additional hydrology larger than the 100-year flood event to see how resilient the alternatives actually are. Ms. Knittweis said that UCD will be adding additional data points to the charts presenting stage results, both upstream and downstream of the current points. Craig Crouch requested one also be added near Twin Cities Road

on the Cosumnes, and on the downstream side of the Hwy 99 crossing as well, and Gil Labrie requested a stage point at the confluence of the North and South Fork Mokelumne Rivers.

4. RECREATION ALTERNATIVES UPDATE – Monica Martin, DWR

Ms. Knittweis introduced Ms. Martin's presentation on current ideas for recreation improvements to be implemented as part of the North Delta project. She indicated that the project team has not fully solidified the ideas, and so welcomes any suggestions. Ms. Martin went through the recreation concepts for Staten Island. Recreation opportunities on Staten Island include wildlife viewing, informational kiosks, non-motorized boating, restroom facilities, and parking facilities, situated so as not to interfere with agricultural operations. She indicated that the Delta Protection Commission has many additional ideas that project staff is investigating. Uncertainties relating to recreational enhancements on Staten Island include funding for operations and maintenance, long-term ownership and how to ensure that facilities are maintained in perpetuity, liability, and safety patrols.

Topper Van Loben Sels suggested adding eco boat tours like Dr. Jeff Hart leads in the area. This suggestion brought up some discussion about the safety hazards of non-motorized boating in the Wimpy's area where speed limits are not controlled.

Ms. Knittweis asked the group if it felt providing fishing access areas would be valuable. Mr. Whitener said that providing access is only valuable when that access is publicized. Currently, there is great bank fishing at the Delta Meadows, but no one uses it. He suggested that project money for recreation enhancements might be better spent publicizing recreation opportunities that already exist but are not very well known.

5. ENVIRONMENTAL DOCUMENTATION PROGRESS REPORT – Chris Elliott, Jones & Stokes

Chris Elliott informed the group that Jones & Stokes (J&S) is continuing with the environmental analysis, and has submitted nine preliminary sections to DWR for review. Ms. Knittweis added that DWR has drafted several sections as well. J&S is also currently in contract discussions with Sacramento County. The date at which an administrative draft will be available may need to be reassessed relative to the incorporation of Sacramento County's alternatives.

Mr. Van Loben Sels, Mr. Hoppe, and Mr. Crouch indicated that a frank discussion regarding floodplain encroachments and consideration of floodplain designation needs to happen as a part of this project.

6. NEXT MEETING

The next NDIG meeting will be held on Wednesday, February 16, 2005 at 9:30 a.m.